

## Nevada Five-Year Maternal and Child Health Needs Assessment Report 2006 - 2010

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# MCH Needs Assessment Report (2006 – 2010)

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The Needs Assessment Report is a collaborative effort of the Bureau of Family Health Services and the Bureau of Health Planning and Statistics.

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### **Acronyms**

ABC – Abstinence, Behavior, Contraception

ADHD – Attention Deficit Hyperactivity Disorder

AIDS – Acquired ImmunoDeficiency Syndrome

BDR – Birth Defects Registry

BFHS – Bureau of Family Health Services

CBOs – Community Based Organizations

CDC – Centers for Disease Control and Prevention

CSHCN – Children with Special Health Care Needs

HIV – Human Immunodeficiency Virus

HPSAs – Health Professional Shortage Areas

MCH – Maternal and Child Health

MCHB - Maternal Child Health Bureau

MCHSSDI – Maternal and Child Health State Systems Development Initiative

MUAs – Medically Underserved Areas

MUPs – Medically Underserved Populations

NSHD – Nevada State Health Division

PCDC – Primary Care Development Center

PRAMS – Pregnancy Risk Assessment Monitoring System

PSAP – Perinatal Substance Abuse Prevention

STDs – Sexually Transmitted Diseases

TANF – Temporary Assistance to Needy Families

UNLV – University of Nevada Las Vegas

WIC - Women, Infants and Children

YRBS – Youth Risk Behavior Survey

#### **EXECUTIVE SUMMARY**

Nevada is a semi-arid, largely mountainous state with numerous valleys of primarily north-south orientation. The Sierra Nevada Mountains form a natural barrier on the west between Nevada and California. The Great Salt Lake Desert isolates eastern Nevada from the population centers of Utah. Approximately 83 percent of Nevada's land area is under the jurisdiction of the Bureau of Land Management; the remaining 17 percent is under private ownership or state and local jurisdiction. Nevada has thirteen Indian colonies or reservations statewide and six military bases located in five counties. Nevada has been the fastest growing state in the nation for many years. According to the Nevada State Demographer's Office, Nevada's population had grown to approximately 2,290,436 in 2003<sup>1</sup>. The majority of the population is located in the southern part of the state; approximately 71 percent (1,620,748) of the population is in Clark County.

Nevada as a state had experienced a fiscal downturn until 2003. For this reason, new programs or additional support for old programs were not possible despite the fast growing population. The Maternal and Child Health (MCH) budget was capped until 2003. While MCH did not have any additional funds appropriated, it had no cuts of its programs, which include Children with Special Health Care Needs (CSHCN) and the Maternal Child Health Prenatal Program. In 2003, it was given permission to raise the fee for newborn screening to cover the cost of an active Birth Defects Registry (BDR).

In addition to the fiscal situation and rapid population growth, immigration and frontier nature of the state also impact the health services delivery system. Nevada's population increased 74.1 percent from 1,315,560 in 1991 to 2,290,436 in 2003. The vast majority of Nevada's growth has been by people moving in from other places. Nevada's rapid population growth is also boosted by one of the country's largest illegal immigrant population. The economic boom of recent years has attracted many illegal immigrants to Nevada in search for a better life. According to a report issued by the Pew Hispanic Center, a Washington D.C. based research group, more than 40 percent of Nevada's foreign-born population is in the state illegally<sup>2</sup>. They have presented challenges and added demands to the health care system in Nevada.

Approximately 87 percent of the state population is in Clark and Washoe counties. The frontier nature of most of Nevada also leads to many challenges in developing a health services delivery system in the state. This is compounded by a lack of providers for both primary and specialty care that is even seen in the most urban communities. MCH supervises the Primary Care Development Center (PCDC). The PCDC is responsible for conducting the surveys necessary to establish Health Professional Shortage Areas (HPSAs), Medically Underserved Areas (MUAs), and Medically Underserved Populations (MUPs). HPSAs can be primary care, dental or mental health shortages and have a very high patient to provider ratio.

PCDC also manages the J-1 Visa program, which places foreign physicians in underserved areas. In FY03 the process for selecting J-1 Visa physicians was changed to give priority to those who serve in a Federally Qualified Health Center or Tribal Health Center, and to not approve any physicians who would be working at a non-primary care

site. Currently, of Nevada's 17 counties, 10 in their entirety are Primary Care and Dental HPSAs, and 12 in their entirety are Mental HPSAs. With the exception of Carson City, the rest of the counties are partial HPSAs in all three designations<sup>3</sup>.

In order to provide acceptable, accessible, accountable, affordable, quality services and programs to children, adolescents, women and children with special health care needs, each state must prepare a statewide needs assessment that identifies their needs every five years. To conduct the Nevada MCH Five Year Needs Assessment, the Nevada State Health Division (NSHD) employed both primary and secondary data sources to provide the necessary information to assess the needs of the three MCH populations. Throughout the process, the focus was on the Bureau of Family Health Services (BFHS) main mission – to improve the health of Nevada's families with emphasis on women, infants, and children, including Children with Special Health Care Needs, by promoting, assuring, and providing health education, prevention activities, quality assurance, and access to health care services.

For the purposes of this project, the three MCH populations are defined as:

- Women and children < 1
- Children (1-9) and adolescents (10-21)
- Children with special health care needs (0-22)

Children with special needs are those children who have, or are at increased risk for, chronic physical, developmental, behavioral, or emotional conditions that require health and related services beyond those typically needed by children in the state.

In July 2004, the Bureau of Family Health Services (BFHS) began a new needs assessment process. The purposes of the Year 2005 Nevada MCH Needs Assessment are to improve Nevada's MCH outcomes and its performance measurement data collection process. The project's two main goals are:

- Develop a replicable process for conducting the Five Year MCH Needs Assessment and implement the process.
- Develop a system for the routine and on-going tracking of Nevada's progress on the MCH performance measures.

The needs assessment process is a joint project between the BFHS and the Bureau of Health Planning and Vital Statistics (BHP&S). The Center for Health Data and Research (CHDR) within the BHP&S is where all the health related data located. The Needs Assessment process was lead by the State Systems Development Initiative (SSDI) Coordinator, a Biostatistician from the CHDR. The collaborative effort of the two Bureaus presented a unique opportunity to combine data analysis and public health capability working toward the same goal. The goal was and remains to utilize the best available data incorporated with MCH expertise into data driven decision-making. Key features of the Year 2005 Needs Assessment process included the development of a "core group" whose member included the Project Director, Project Coordinator, Chief of the Bureau of Family Health Services, Chief of the Bureau of Health Planning and Vital

Statistics, the State Biostatistician, all the MCH related program managers, and representatives from the Washoe and Clark County Health Districts. The Maternal and Child Health Advisory Board also approved the process and the findings. The core group was charged with reviewing the needs assessment outline, assisting the project coordinator with additional data collection, determine the locations of the focus group meetings, and making suggestions or additions to the final product. The project coordinator was the main staff that compiled the data and wrote the needs assessment report. The Project Coordinator and selected BFHS program managers had primary responsibility for conducting the focus group meetings. There were nine focus group meetings scheduled during November and December of 2004. Three meeting were conducted for each of the three MCH populations:

- Women and children < 1
- Children (1 − 9)
- Adolescents (10 − 21)

For each population, two urban and one rural location were selected to hold the meeting. A total of nine meetings were conducted in Las Vegas (3), Reno (3), Yerington (1), Winnemucca (1), and Pahrump (1). A consultant firm, LeCroy & Milligan Associates, Inc, was hired to conduct the needs assessment for Children with Special Health Care Needs (0-22). The focus group meetings were a tool to build bridges among traditional and non-tradition partners in the public health community. They were a primary source of information that helped shaped the foundation of the needs assessment. Each meeting started off with a Power Point presentation stating the goals and purposes of the needs assessment and the results of the past national and state performance measures. Then the participants were asked to discuss and deliberate the needs and identify inequities and inadequacies of care that they saw in their urban or rural settings within each specific population. Response to the focus group process was excellent especially for the Las Vegas and Reno meetings. Each meeting lasted for four hours approximately. Among the nine meetings, a myriad of priority areas were identified and many themes emerged. Not only did they define problems, but they also suggested solutions. All participants agreed the current priorities are important; they should remain the same and continue to be worked on.

A summarized outline from each meeting was generated after further review of the meetings writing notes and audiotapes. Issues raised and discussed during all the focus group meetings along with the primary data analysis was then presented to the MCH core group members in March 2005. Problems and issues highlighted in the focus group meeting outlines along with their recommendations were discussed and high-risk groups identified and service deficiency suggested. Based on all these information, the core group members took the recommendations of the focus groups and a broad list of priority areas was drafted. Using the list of priorities as a guide, the core group members reviewed and revised the past year targets for performance measures before determined the nine priorities for the next five years. Based on the priorities and the availability of measurable data, eight new state performance measures were selected by the core group members. These findings were presented at a public hearing held during a meeting of the Maternal and Child Health Advisory Board where no changes were proposed. The

MCHAB subsequently approved the priorities and state performance measures for Nevada's 2005 MCH Needs Assessment.

### **Priority Areas For Upcoming Year (2006-2010):**

- Increase access to primary care services, providers, facilities, resources, and payor sources among the MCH populations.
- Increase access to oral health services, providers, facilities, resources, and payor sources among the MCH populations.
- Increase access to mental health services, providers, facilities, resources, and payor sources among the MCH populations.
- Create a unified data system and surveillance system to monitor services delivered to the MCH populations.
- Create "braided" services for CSHCN resources in Nevada including "one-stop-shopping" and "no-wrong-door" models of service delivery.
- Increase financial coverage and decrease financial gaps for health services among the MCH populations.
- Decrease the incidence of domestic violence among women of child-bearing age.
- Decrease the risk factors associated with obesity for children and women.
- Decrease unintentional injuries among the MCH populations.

Based on the above priority areas, eight measurable State-Negotiated Performance Measures are created:

- 1. The percentage of women of childbearing age who receive screening and assistance for domestic violence should be increased.
- 2. Access to preventive oral health services for the Medicaid population of children and youth should be increased.
- 3. Obesity among women ages 18 to 44 should be decreased.
- 4. Teen birth rates (per 1,000) among Hispanic adolescents ages 15-17 should be reduced.
- 5. All infants born in the state will have a newborn hearing screening prior to discharge from the hospital.
- 6. The percent of children and youth ages birth through 18 who die from unintentional injuries should be decreased.
- 7. Increase the ratio of primary care providers to the number of children and youth ages birth to twenty-one and women of child-bearing age.
- 8. The percent of women (18-44) who feel down or depressed should be decreased.

The areas of most concern for the three MCH populations, and perhaps the state as a whole are: oral/dental health care, mental health services, and access to primary care services. Nevada has been the fastest growing state in the United States for the last 17 years. The rapid population growth has presented continuing challenges and added demands on the health care system in relation to both access to and quality of care. Beside the population growth, the demography of Nevada also presents challenges to improving access to health care. Of Nevada's 17 counties, Clark and Washoe are considered urban with approximately 87 percent of the population; Carson City and Elko are designated as a Small Metropolitan Area. Douglas, Lyon, and Storey counties are rural; and Esmeralda, Humboldt, Lander, Lincoln, Mineral, Nye, Pershing and White Pine are frontier counties.

The rural and frontier residents, while comprising a small portion of the state's population, often require unique responses to their health care needs. Rural and frontier residents are generally older, poorer, and have fewer health resources than their urban counterparts. Given the provider shortages that are common in many rural areas, some rural clients drive over one hundred miles to access care. With the dispersion of the rural population, trained providers confront financial difficulties in maintaining a viable practice for small client populations. In addition, they experience the difficulties of isolation from professional support and the specialty services their clients may require. Overall, there needs to be more communication and less fragmentation of services between policy-makers, state agencies, health systems, tribal health systems, and between some public and private providers in the state of Nevada. It is essential to have the data needed to educate policy-makers who make funding decisions on local, state, and national level. This will help forge the path necessary to build and strengthen the current public health system as Nevada moves into the future.

# OVERVIEW OF THE NEVADA MATERNAL AND CHILD HEALTH POPULATIONS' HEALTH STATUS

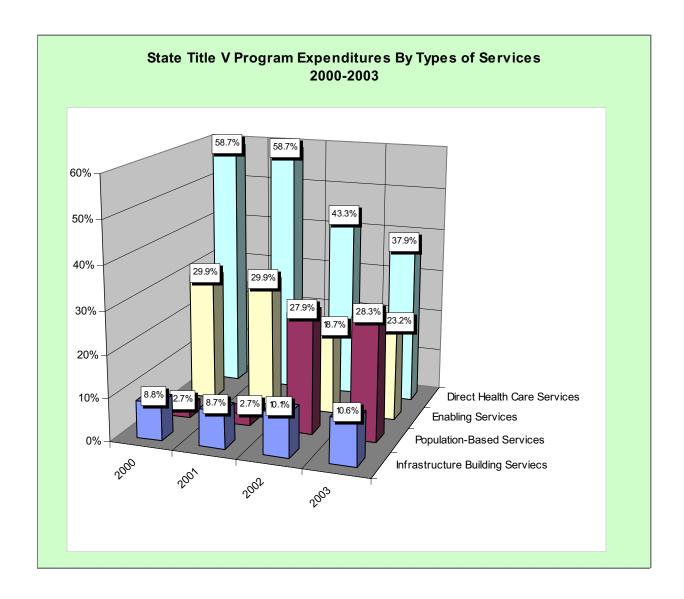
Nevada's Maternal and Child Health (MCH) Title V Program is housed in the Bureau of Family Health Services within the Nevada State Health Division. The MCH program is dedicated to improving the health of families, with emphasis on women, infants and children, including Children with Special Health Care Needs, by promoting, assuring and providing health education, prevention activities, quality assurance and health care services. The BFHS administers the following programs, projects, and initiatives: Maternal Child Health Information and Referral Line, Children with Special Health Care Needs (CSHCN), Primary Care Development Center (PCDC), Perinatal Substance Abuse Prevention (PSAP), Injury and Rape Prevention, Women, Infants and Children (WIC), Child and Adolescent Health including Teen Pregnancy Prevention, and Oral Health Initiative.

The MCH Needs Assessment (2000-2005) had shown that NSHD needs to move away from encumbering most of its funds in direct health care services and move more towards enabling services, population-based services, and infrastructure building. The Nevada State Health Division (NSHD) has made an effort to slowly make its way down the hierarchy of the MCH Services Pyramid. According to the Maternal Child Health Bureau (Nevada Title V Snapshot 2003), Nevada spent \$1,018,179 (31.3%) of its Title V Program budget on direct health care services in 2003 compared to \$1,702,963 (58.7%) in 2000. It is good that the NSHD recognized the community need for more population-based services and infrastructure building services but due to fiscal downturn the total expenditures for the MCH population was reduced from \$2,901,289 in 2000 to \$2,689,194 in 2003 despite the rapid population growth.

State Title V Program Expenditures By Types of Services				
	FY 2000	FY 2001	FY 2002	FY 2003
Type of Services	Expended	Expended	Expended	Expended
Direct Health Care Services	1,702,963	1,946,685	1,167,243	1,018,179
Enabling Services	866,807	991,582	505,310	623,936
Population-Based Services	77,605	89,541	753,171	761,622
Infrastructure Building Services	253,914	288,521	272,854	285,457
Total	2,901,289	3,316,329	2,698,578	2,689,194

Source: Bureau of Family Health Services, 2003 Maternal and Child Health Annual Report

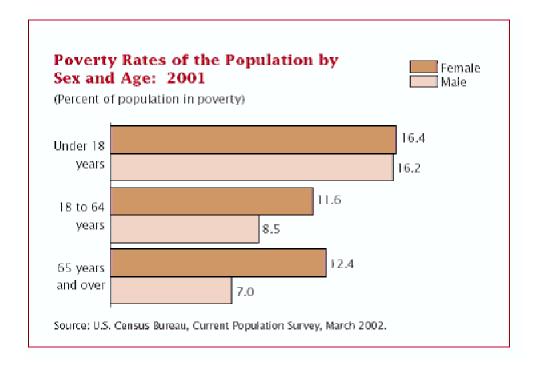
### Nevada State Title V Program Expenditures by Types of Services (2000-2003)



Source: Bureau of Family Health Services, 2003 Maternal and Child Health Annual Report

### Status of Nevada Children

Although economic indicators overall suggest a healthy economy for Nevada, the poverty rate indicates that segments of the population still struggle with scarce financial resources and the increased health risks associated with a lower economic standard of living. According to the U.S. Census Bureau, an average of 9.9 percent of Nevadans lived in poverty in 2002-2003 compared to the 2001-2002 averages of 8.0 percent. 19.3 percent of Nevadans were without health insurance in 2002-2003 compared to the 2001-2002 average of 17.9 percent. Throughout the needs assessment, the effects of poverty, non-citizenship, racial and ethnic disparities in health status, geography, urbanization and private sector impacts on the delivery of services for the Nevada MCH population were found. According to the U.S. Census Bureau Current Population Survey, children under 18 constituted the age group with the highest rate of poverty<sup>4</sup>. It is a personal and civic duty to raise, protect, educate, clothe, and feed our children to become productive members of society.



Some key examples come from Kids Count and Nevada Kids Count (Annie E. Casey Foundation 2001), Nevada ranked 32<sup>nd</sup> among the 50 states on the overall well being of children. This ranking has improved from 35<sup>th</sup> in 1996. The Annie E. Casey Foundation tracks the status of children by using a method that evaluates the benchmarks of child well being. Below are highlights from this document<sup>5</sup> (note that the scale is 1-50, 50 being the "worst"):

- Nevada ranks  $22^{nd}$  (7.6%) in the percent of low birth weight babies for 2001, this ranking has improved from  $25^{th}$  in 1996.
- Nevada ranks 9<sup>th</sup> in the infant mortality rate (5.7 deaths per 1,000 live births) for 2001, this ranking has improved from 13<sup>th</sup> in 1996.

- Nevada ranks 21<sup>st</sup> in the child death rate (22 deaths per 100,000 children ages 1-14), this ranking has improved from 34<sup>th</sup> in 1996.
- Nevada ranks 49<sup>th</sup> (16%) in the percent of teens who are high school dropouts (ages 16-19); Nevada had the nation's highest percentage (ranked 50<sup>th</sup>) of teens dropouts in 1996.
- Nevada ranks 32<sup>nd</sup> (10%) in the percent of teens not attending school and not working (ages 16-19); it was ranked 34<sup>th</sup> in 1996.
- Nevada ranks 13<sup>th</sup> (21%) for the percent of children living in families where no parent has full- time, year-around employment. It was ranked 11<sup>th</sup> in 1996.
- Nevada ranks 22<sup>nd</sup> (14%) in the percent of children under age 18 who live in families with incomes below the U.S. poverty threshold. It was ranked 14<sup>th</sup> in 1996.
- Nevada ranks 29<sup>th</sup> (29%) in the percent of families headed by a single parent. It was ranked 29<sup>th</sup> in 1996.

### **Children with Special Health Care Needs**

Children with special health care needs are defined by the U.S. Maternal and Child Health Bureau as:

"...those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally."

Children with special needs can have conditions that range from asthma to developmental delays such as autism or cerebral palsy or chronic mental health or behavioral conditions such as Attention Deficit Hyperactivity Disorder (ADHD), schizophrenia or bipolar disorder. According to the U.S. Centers for Disease Control and Prevention's National Survey of Children with Special Health Care Needs (National Survey)<sup>6</sup> released in 2004, there were approximately 58,639 children with special needs living in Nevada in 2001. This represented about 11 percent of the Nevada total child population aged 0-17 (approximately 533,000). Most of the children with special needs lived in urban centers: 66 percent in the Las Vegas area and 22 percent in the Reno/Carson City area. However, as a percentage of the total child population by region, children with special needs were at least as prevalent in the rural regions as they were in the urban regions.

The following section reviews some of the survey's findings about the prevalence of special health care needs among children for Nevada and the United States.

Child-Level Prevalence:	State %	National %
Percent of Children with Special Health Care Needs.	10.7	12.8

Prevalence By Age:	State %	National %
Children 0-5 years of age.	6.1	7.8
Children 6-11 years of age.	12.8	14.6
Children 12-17 years of age.	13.6	15.8

Prevalence By Poverty Level:	State %	National %
0%-99% Federal Poverty Level	8.0	13.6
100%-199% Federal Poverty Level	10.8	13.6
200%-399% Federal Poverty Level	12.4	12.8
400% Federal Poverty Level or greater	11.3	13.6

Source: CDC National Survey of Children with Special Health Care Needs

Prevalence By Race/Ethnicity:	State %	National %
Hispanic	6.9	8.6
White (Non-Hispanic)	12.4	14.2
Black (Non-Hispanic)	14.9	13
Asian (Non-Hispanic)		4.4
Native American/Alaskan Native (Non-Hispanic)		16.6
Native Hawaiian/Pacific Islander (Non-Hispanic)		9.6

Due to the small size of this group in the state population, data have been suppressed to protect respondents' confidentiality.

Child Health	State %	National %
Percent of Children with Special Health Care Needs whose conditions affect their activities usually, always, or a great		
deal.	25.1	23.2
Percent of Children with Special Health Care Needs with 11		
or more days of school absences due to illness.	17.2	15.8

Health Insurance Coverage	State %	National %
Percent of Children with Special Health Care Needs without insurance at some point in the past year.	15.5	11.6
Percent of Children with Special Health Care Needs currently uninsured.	7.6	5.2
Percent of currently insured Children with Special Health Care Needs with insurance that is not adequate.	36.0	33.5

Source: CDC National Survey of Children with Special Health Care Needs

Access to Care	State %	National %
Percent of Children with Special Health Care Needs with any		
unmet need for specific health care services.	20.8	17.7
Percent of Children with Special Health Care Needs with any		
unmet need for family support services.	5.8	5.1
Percent of Children with Special Health Care Needs peeding		
Percent of Children with Special Health Care Needs needing specialty care who had difficulty getting a referral.	29.5	21.9
Democratical Children with Consider Locate Comp. No. do without a		
Percent of Children with Special Health Care Needs without a usual source of care (or who rely on the emergency room).	13.2	9.3
Demonstrate Children with Constitutional Constitution of Children with constitution		
Percent of Children with Special Health Care Needs without a personal doctor or nurse.	15.3	11

Family Centered Care	State %	National %
Percent of Children with Special Health Care Needs without		
family centered care.	37.3	33.5

Impact On Family	State %	National %
Percent of Children with Special Health Care Needs whose families pay \$1,000 or more in medical expenses per year.	14.2	11.2
Percent of Children with Special Health Care Needs whose condition caused financial problems for the family.	22.0	20.9
Percent of Children with Special Health Care Needs whose families spend 11 or more hours per week providing or coordinating care.	17.2	13.5
		10.0
Percent of Children with Special Health Care Needs whose condition affected the employment of family members.	28.9	29.9

Source: CDC National Survey of Children with Special Health Care Needs

A separate Needs Assessment for Children with Special Health Care Needs was completed in January 2005 by LeCroy & Milligan Associates, Inc., for the Bureau of Family Health Services. Entitled "Nevada CSHCN Needs Assessment," this multimethod Needs Assessment was completed over a five months period from August through December 2004. The multi-method approach used qualitative methods including focus groups, key stakeholder interviews, and surveys. The report also looked at data from CDC, Internet directories and current resource directories. Other states' innovative strategies for effectively reducing barriers to care were also reviewed. For this needs assessment, Nevada was divided into 5 regions to examine differences between urban and rural areas. These regions were:

- 1. Central (rural): Esmeralda, Hawthorne, Lincoln, Mineral, Nye Counties
- 2. Eastern (rural): Elko, Eureka, White Pine Counties
- 3. Northern (rural): Churchill, Humboldt, Lander, Lyon, Pershing Counties
- 4. Southern (urban): Clark County
- 5. Western (urban): Carson City, Douglas, Storey, Washoe Counties

The following are the findings of this needs assessment:

Children with special needs and their families' universal needs:

- Financial support for non-covered expenses
- Adequate health care insurance
- Medical and mental pediatric specialists and timely diagnoses
- Coordination of Services
- Professionals who are informed about special needs issues
- Information about available resources and procedures for obtaining services
- Education about children's conditions and training on how to advocate for their children.
- Social/Emotional support, particularly respite and counseling.

### Universal barriers to meeting needs:

- Virtually all families with children with special needs have financial needs that are not being met.
- Information about available resources and services is difficult to obtain.
- The public assistance (i.e. Medicaid) application process is complicated and time consuming.
- There are not enough medical and mental health professionals to meet the demand.
- Multiple submission of applications and assessments are often required because services are not coordinated.
- Early childhood transitions into school are often difficult.

Other needs related to specific populations or regions that were commonly mentioned include:

- Counseling for parents and siblings for emotional support and development.
- Transition services for young adults with special needs who want to live independently.
- Transportation to service providers particularly from rural regions where families have to travel several hours to urban centers to see medical specialists.
- Translation services for non-English speakers.
- Skilled nursing services for home, school, and child care settings.

Participants were able to identify gaps in services (unmet needs).

- Pediatric specialists: the rural regions have very few to no pediatric specialists
  and the urban areas have too few to meet the demand; some specialists are not
  represented at all in the state; the number of geneticists is also far too low to meet
  the demand.
- Mental health providers, especially psychiatrists.
- Respite care for medically-fragile children that require specialized medical care.
- Dentists that accept Medicaid.
- Remote regions (especially reservations) have little to no services of any kind.

### **Demography**

Since 1990, Nevada has been the fastest growing state in the nation; the population increased 74.1 percent from 1,315,560 in 1991 to 2,290,436 in 2003. Las Vegas is the fastest growing metropolitan area in both Nevada and the nation. The vast majority of growth has been by in-migration. The population growth will continue to have an impact on the needs for health services. From 1991 to 2003, in Clark County alone, there was a 94.1 percent rise in population; Washoe County showed a 40.3 percent increase while all other areas increased by 38.3 percent. Approximately 87 percent of the state population is in Clark and Washoe Counties. The rural and frontier residents, while comprising a small portion of the state's population, often require unique responses to their health care needs.

The racial/ethnic make-up of the state in 2003 was Non-Hispanic White (63.7%), Black (6.9%), Native American (1.4%), Asian/Pacific Islanders (6.0%), and Hispanic (22.0%). From 1991 to 2003, the fastest growing ethnic group in the state was of Hispanic origin, which increased by 220.1 percent while Asians increased by 205.2 percent. The growth of minority populations will present continuing challenges and opportunities to the design of health services that are culturally accessible and relevant to the needs of the various population groups.

Nevada Population Estimates by Gender, Race/Ethnicity and County/Region, 1991-2003

		Gen	der		Ra	ace/Ethnicity	ſ			County/Regio	n
Year	Total	Male	Female	White	Black	Native	Asian	Hispanic	Clark	Washoe	All Other Counties
1991	1,315,560	668,719	646,841	1,004,406	89,590	19,356	45,233	156,976	835,080	265,762	214,718
1992	1,368,618	695,498	673,120	1,031,672	93,609	20,047	49,738	173,552	873,730	273,178	221,710
1993	1,428,396	725,935	702,461	1,062,017	97,805	20,800	54,988	192,785	916,837	282,214	229,345
1994	1,522,042	773,768	748,274	1,108,700	104,270	21,936	63,633	223,503	990,564	293,141	238,337
1995	1,807,511	817,263	790,247	1,151,956	109,808	22,942	71,332	251,473	1,055,435	302,748	249,327
1996	1,692,058	860,375	831,683	1,193,495	115,262	23,971	78,952	280,378	1,119,052	312,366	260,640
1997	1,780,933	905,650	875,283	1,235,588	121,441	24,986	87,345	311,573	1,193,388	316,160	271,385
1998	1,866,012	948,754	917,258	1,275,200	127,256	26,015	95,615	341,927	1,261,150	327,899	276,963
1999	1,941,238	986,947	954,290	1,308,332	132,695	26,895	103,122	370,194	1,327,145	334,601	279,491
2000	1,996,754	1,014,969	981,785	1,331,208	136,259	27,703	109,481	392,103	1,373,205	341,935	281,613
2001	2,125,709	1,080,145	1,045,565	1,389,687	146,398	29, 135	121,106	439,383	1,485,855	353,271	286,584
2002	2,210,648	1,122,810	1,087,838	1,427,502	152,813	30,084	129,157	471,092	1,560,653	357,776	292,219
2003	2,290,436	1,163,359	1,127,077	1,459,897	158,103	30,993	138,061	503,382	1,620,748	372,813	296,875

### **Birth Rate**

According to statistics ("Births: Preliminary Data for 2002") released by the Centers for Disease Control and Prevention (CDC), the U.S. birth rate has dropped to the lowest level since national data has been available<sup>7</sup>. The birth rate fell to 13.9 per 1,000 population in 2002, down from 14.1 per 1,000 population in 2001 and down approximately 17 percent from the recent peak in 1990 (16.7 per 1,000). CDC analysts say the birth rate is dropping as the increasing life span of Americans results in a smaller proportion of women of childbearing age (15-44). In Nevada, approximately 65.2 percent of the population was under the age of 44 in 2003. The top three age groups were 35-44 (15.2%), 25-34 (14.2%), and 15-24 (14.2%). While the state continues to see an increase in the total number of births, the birth rate (14.7 per 1,000 population) has continued to decrease since 1990. The crude birth rate for Nevada residents was 14.7 per 1,000 populations in 2003. The Hispanic ethnic group had the highest crude birth rate (24.5 per 1,000 population), followed by Black, Asian, and Native Americans. White had the lowest crude birth rate of 10.8 per 1,000 population. While approximately 22.0 percent of the state population was of Hispanic origin, 36.7 percent of the total births in 2003 were of Hispanic origin.

Crude Birth	Rate by	Race/Ethnicity,
Nevada	Resider	nts.

			2001				
	White	Black	Native	Asian	Hispanic	Other/ Unknown	Total
Live Births	15,264		399		10,831		
Adjusted Number	15,453	2,419	404	2,056	10,965		31,297
Birth Rate (1/1,000)*	11.12	16.52	13.86	16.98	24.96		14.72
Population	1,389,687	146,398	29,135	121,106	439,383		2,125,709

			2002				
	White	Black	Native	Asian	Hispanic	Other/ Unknown	Total
Live Births	15,337	2,512	419	2,339	11,340	476	32,423
Adjusted Number	15,566	2,549	425	2,374	11,509		32,423
Birth Rate (1/1,000)*	10.90	16.68	14.14	18.38	24.43		14.67
Population	1,427,502	152,813	30,084	129,157	471,092		2,210,648

			2003				
	White	Black	Native	Asian	Hispanic	Other/ Unknown	Total
Live Births	15,541	2,732	404	2,383	12,192	353	33,605
Adjusted Number	15,706	2,761	408	2,408	12,321		33,605
Birth Rate (1/1,000)*			13.17	17.44			14.67
Population	1,459,897	158,103	30,993	138,061	503,382		2,290,436

<sup>\*</sup>Rates have been adjusted for unknown race/ethnicity.

Note: Caution should be used when using rates for comparing races/ethnicities with a low number of live births.

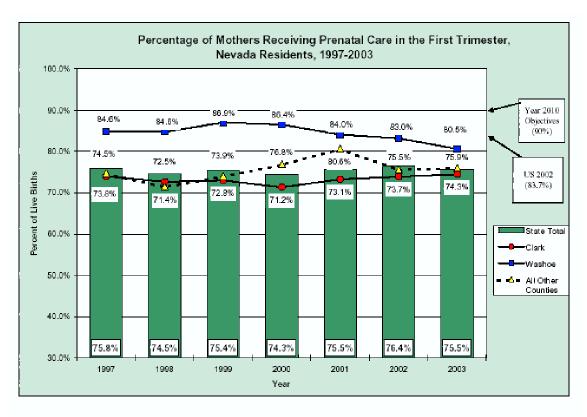
### Births by Age of Mother and Race/Ethnicity,

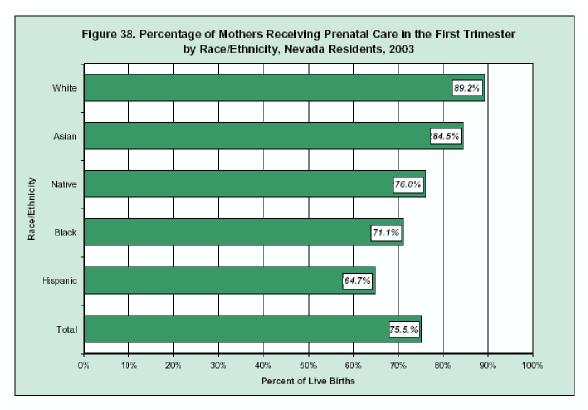
### Nevada Residents, 2003

Age of Mother	White	Black	Native	Asian	Hispanic	Other/ Unknown	Total
10-14	9	13	1	4	40	0	67
15-17	324	162	13	36	701	21	
18-19	906	294	51	100	1,086	26	2,463
20-24	3,810	923	121	408	3,556	89	8,907
25-29	4,296	687	102	685	3,455	76	9,301
30-34	3,941	396	74	694	2,177	78	7,360
35-39	1,845	211	35	362	957	47	3,457
40-44	368	45	6	86	207	11	723
45+	37	0	0	8	7	1	53
Unknown	5	1	1	0	6	4	17
Total	15,541	2,732	404	2,383	12,192	353	33,605

#### **Prenatal Care**

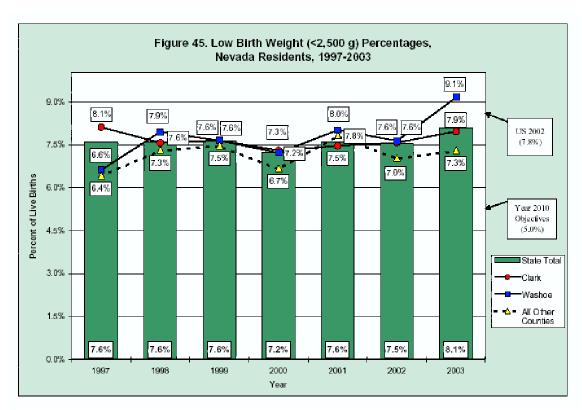
Many studies have shown that early and regular prenatal care is important for the health of both mothers and their babies. It gives health care providers the chance to find problems early so that they can be treated as soon as possible. Women who see a health care provider regularly during pregnancy have healthier babies, are less likely to deliver prematurely, and are less likely to have other serious problems related to pregnancy. In Nevada, the rate of prenatal care in the first trimester was 75.5 percent in 2003. Among the racial/ethnic groups, Whites had the highest prenatal care rate, followed by Asians, Native Americans, Blacks and Hispanics. Even though the Hispanic population had the highest crude birth rate and tend to have babies in younger ages, they have the lowest number accessing prenatal care in the first trimester.

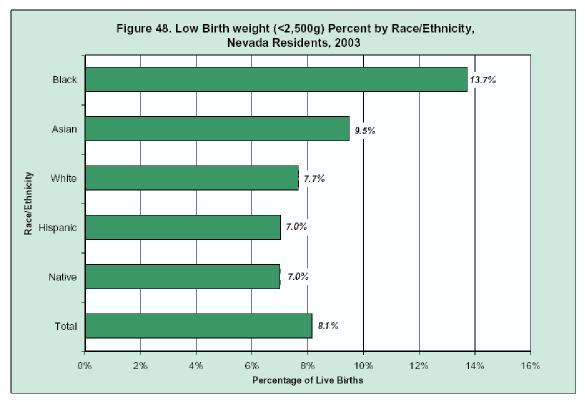




### Low Birth Weight

Low birth weight affects about one in every 13 babies born each year in the United States. According to a CDC report "Births, Preliminary Data for 2002," the percent of low birth weight babies (birth weight of less than 2,500 grams, or about 5.5 pounds) increased to 7.8 percent, up from 7.7 percent in 2001 and the highest level in more than 30 years. Low birth weight is the factor most closely associated with neonatal mortality. There are two categories: preterm births (also called premature births) occur before the end of the 37<sup>th</sup> week of pregnancy. The second category is "Small-for-date babies (small for gestational age or growth-restricted)" who may be full-term but are underweight. Low birth weight infants are more likely to experience long-term disabilities or death during the first year of life than are infants of normal weight. In Nevada, the incidence of low birth weight babies was 8.1 percent; Washoe County had the highest rate of 9.1 percent in 2003.





Source: Center for Health Data and Research, Nevada Vital Statistics Report 2001-2003

In Nevada, Blacks had the highest low birth weight rate among race/ethnic groups, 13.7 percent, followed by Asians which were 9.5 percent in 2003. Despite tremendous advances in medicine and a growing body of research on explanatory risk factors for adverse pregnancy outcomes, the gap between Whites and Blacks has widened. It is well known that much of the disparity of preterm delivery and low birth weight is associated with racial and ethnic groups living under the burden of sub-optimal social, economic and health conditions. However, poverty, race and ethnicity are not the only contributing factors and, in and of themselves, do not explain the disparities in pregnancy outcomes. For example, Hispanics have the lowest rate of prenatal care visits in the first trimester but have a better than average low birth weight rate. Hypotheses centering on prenatal care, health behaviors, teen births, poverty, education and genetics have not sufficiently explained the causes of preterm birth and low birth weight, nor the disparities in outcomes. There may be a simple difference in "dose" of the experience or exposure to certain risk factors that leads to the poor outcome or it may be that a combination of common and uncommon experiences in one individual culminates in a poor outcome.

### Low Birth Weight Percent by Race/Ethnicity, Nevada Residents, 2003

Birth Weight Category	White	Black	Native	Asian	Hispanic	Other/ Unknown	Total
Very Low Birth Weight (<1,500g) Adjusted Number Percent	193 198 1.26%	74	5 5 1.26%	33 34 1.41%	118 121 0.98%	0	432 432 1.29%
Low Birth Weight (<2,500g) Adjusted Number Percent	1,181 1,204 7.66%	378	28 29 6.99%	228	865	0	2,704 2,704 8.05%
Live Births Adjusted Number	15,541 15,706		404 408				33,605 33,605

Note: The low birth weight category includes those births of very low birth weight. Percentages are adjusted for unknown race/ethnicity.

Source: Center for Health Data and Research, Nevada Vital Statistics Report 2001-2003

### Low Birth Weight Percent by County of Residence Nevada, 2001-2003

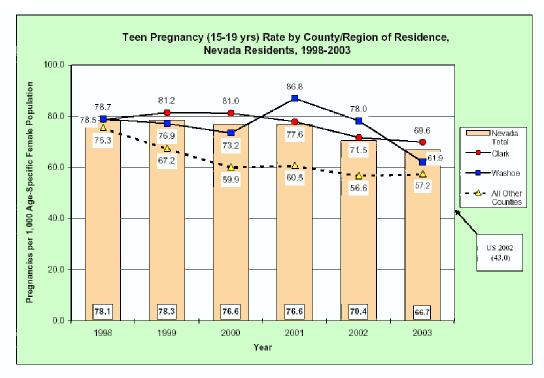
County of Residence		В	Very irth Weigh	Low rt (<1,500	g)					h Weight 500g)				Total Births	
mesidelice	20 Number		20 Number		20 Number		20 Number			02 Percent	200 Number		2001	2002	2003
Carson City Churchill Clark	11 2 230	1.5% 0.6% 1.0%	10 4 291	1.4% 1.2% 1.2%	10 1 316	1.4% 0.3%	67 29 1,703	9.0% 8.5% 7.4%	60 17	8.3%	58 14 1,963	8.0% 4.3% 7.9%	744 343 22,861	721 340 23,756	721 327 24,766
Dougías Elko Esmeralda	4 6 0	1.1% 0.9% 0.0%	4 3 0	1.0% 0.5% 0.0%	3 7 0	0.7% 1.1% 0.0%	30 42 0	8.5% 6.6% 0.0%		7.5%	34 36 0	8.1% 5.6% 0.0%	355 638 7	407 585 5	420 641 2
Eureka Humboldt Lander	0 2 1	0.0% 1.0% 1.2%	1 2 1	7.1% 0.9% 1.5%		0.0% 0.5% 1.9%	2 11 4	10.0% 5.4% 4.9%	11	4.9%	0 18 5	0.0% 8.6% 9.4%	20 205 82	14 225 68	16 209 53
Linco(n Lyon Mineral	0 5 0	0.0% 1.3% 0.0%	0 2 0	0.0% 0.4% 0.0%	0 6 0	0.0% 1.2% 0.0%	4 36 4	10.0% 9.2% 10.3%	21		4 44 3	9.3% 8.8% 7.5%	40 391 39	40 463 39	43 499 40
Nye Pershing Storey	7 0 0	2.1% 0.0% 0.0%	4 4 1	1.3% 6.3% 9.1%	4 1 0	1.3% 2.1% 0.0%	23 0 0	6.9% 0.0% 0.0%	7	11.1%	22 5 0	6.9% 10.6% 0.0%	332 72 8	307 63 11	317 47 19
Washoe White Pine Nevada Total	59 1 328	1.2% 1.4% 1.0%	81 3 411	1.5% 3.9% 1.3%	82 0 432	1.5% 0.0% 1.3%	407 9 2,371	8.0% 13.0% 7.6%	- 5	7.6% 6.5% 7.5%	493 5: 2,704	9.1% 5.7% 8.0%	5,091 69 31,297	5,302 77 32,423	5,398 87 33,605
Out of State Total	20 348	6.2% 1.1%	24 435	6.4% 1.33%	28 460		72 2,443	22.2% 7.7%	81 2,517	21.6% 7.7%	83 2,787	24.7% 8.2%	325 31,622	375 32,798	336 33,941

Note: The Low Birth Weight category includes those births of Very Low Birth weight.

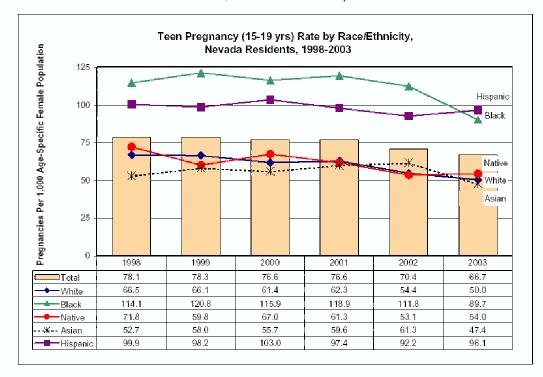
### Teen Pregnancy and Teen Birth

The U.S. teen pregnancy rate (pregnancy data include births, abortions, and fetal deaths) for teens aged 15-19 decreased 28 percent between 1990 and 2000. After reaching 117 pregnancies per 1,000 females aged 15-19 in 1990, the pregnancy rate has decreased to 84 per 1,000 in 2000. The teen birth rate has declined slowly but steadily from 1991 to 2002 (43.0 per 1,000) with an overall decline of 30 percent for those aged 15 to 19. According to the National Campaign to Prevent Teen Pregnancy, United States has the highest rates of teen pregnancy and births in the western industrialized world. Teen pregnancy costs the United States at least \$7 billion annually.

In Nevada, the teen pregnancy (15-19) rate decreased 14.6 percent between 1998 and 2003. The teen pregnancy rate decreased to 66.7 per 1,000 in 2003 from 78.1 per 1,000 in 1998. The rates of Hispanics and Blacks remain higher than for other groups. In 2003, Hispanic teens had the highest teen pregnancy rate, surpassing Black teens. The Hispanic and Black teen pregnancy rates were 96.1 per 1,000 and 89.7 per 1,000 respectively in 2003. Asians and Whites had the lowest teen pregnancy rate of 47.4 per 1,000 and 50.0 per 1,000 respectively in 2003. The teen birth (15-19) rate decreased 7.7 percent to 48.4 per 1,000 in 2003 from 52.5 per 1,000 in 2001. There are many consequences of teen pregnancy; teen mothers are less likely to complete high school (only one-third receive a high school diploma) and only 1.5 percent have a college degree by age 30. Teen mothers are more likely to end up on welfare (nearly 80 percent of unmarried teen mothers end up on welfare). In addition, the children of teenage mothers have lower birth weights, are more likely to perform poorly in school, and are at greater risk of abuse and neglect. Moreover, the sons of teen mothers are 13 percent more likely to end up in prison while teen daughters are 22 percent more likely to become teen mothers themselves.



Source: Center for Health Data and Research, Nevada Vital Statistics Report 2001-2003



Teen Pregnancy (15-19 yrs) by Race/Ethnicity, Nevada Residents, 1998-2003

	Year and			F	Race/Ethnicity	l		
	Category	White	Black	Native	Asian	Hispanic	Other/ Unknown	Total
1998	Uwe Births	1,599	430	74	121	1,400	29	3,653
	Abortions	552	105	1	38	70	409	1,175
	Fetal Deaths	12	6	0	.0	5	0	.23
	Total	2,163	541	75	159	1,475	4.38	4,851
	Adj. Total	2,471	601	76	180	1,524		4,851
	Rate*	66.51	114.13	71.77	52.69	99.89		78.07
1999	Uwe Births	1,570	450	63	107	1,451	69	3,710
	Abortions	480	110	О	52	67	619	1,328
	Felai Deaths	18	.2	1	1	7	0	.29
	Total	2,066	562	64	160	1,525	668	5,067
	Adj. Total	2,517	667	65	207	1,611		5,067
	Rate*	66.07	120.83	59.75	58.03	96.19		78.34
2000	Live Births	1,466	429	76	130	1,624	45	3,770
	Abortions	503	119	О	46	87	640	1,395
	Felai Deaths	10	6	О	0	15	0	31
	Total	1,979	554	76	176	1,726	665	5,196
	Adj. Total	2,423	660	77	217	1,819		5,196
	Rate*	61.44	115.89	66.97	55.74	102.97		76,60
2001	Live Births	1,313	460	69	125	1,642	54	3,663
	Abortions	393	109	2	53	122	974	1,653
	Felal Deaths	8	6	O	2	10	0	.26
	Total	1,714	575	71	180	1,774	1,028	5,342
	Adj. Total	2,478	720	71	230	1,843		5,342
	Rate*	62.33	118.91	61.31	59.65	97.41		76.60
2002	Live Births	1,259	471	62	143	1,648	54	3,637
	Abortions	596	136	8	62	177	479	1,458
	Felai Deaths	6	9	0	0	11	0	26
	Total	1,861	616	70	205	1,836	533	5,121
	Adj. Total	2,220	717	64	248	1,872		5,121
	Rate*	54.41	111.84	53.08	61.29	92.19		70:37
2003	Live Births	1,230	456	64	136	1,787	47	3,720
I	Abortions	740	106	1	60	194	271	1,372
I	Fetal Deaths	12	6	O	2	8	0	.28
	Total	1,982	568	65	198	1,989	318	5,120
	Adj. Total	2,113	606	69	211	2,121		5,120
	Rate*	50.02	89.74	53.97	47.42	96.08		66.67

\* Rates are per 1,000 age-specific female population and have been adjusted for other/unknown race/ethnicity.

Note: The rates for the counties where the total number of pregnancies was less than 5 are not shown.

Teen Births by C	ounty of Residence	Nevada, 2003
------------------	--------------------	--------------

Mother's County of	10-	14	15-	17	18-	-19	15-	19
Residence	Births	Rate*	Births	Rate*	Births	Rate*	Births	Rate*
Carson City	0		32	30.25	79	112.79	111	63.13
Churchill	0		15	25.94	32	75.87	47	47.00
Clark	54	0.99	949	29.89	1,764	81.04	2,713	50.70
Douglas	0		4		27	53.37		21.90
Elko	i 1		29	25.91	56	76.98	85	46.03
Esmeralda	0		0		0		0	
Eureka	0		0		_1		. 11	
Humboldt	0		14	37.99	27	120.07	41	69.09
Lander	0		0		11	112.75	11	48.18
Lincoln	0		1	47.00	1	07.00	2 59	44.40
Lyon	0		14	17.28	45	87.23		44.49
Mineral	U		ı.		4		5	37.10
Nγe	4		21	29.44	34	84,03	55	49.20
Pershing	Ô		4	29,44	54 6	56.69	10	38.76
Storey	0		0		2	56.65	2	30.70
Stoley	· ·		J		_		_	
Washoe	11	0.85	170	22.12	370	69.62	540	41.54
White Pine	o		3		4		7	27.70
Nevada Total	67	0.86		27.48	2,463	79.32	3.720	48.44
		0.00	1,201		_,,	, , , , ,	5,120	10.11
Out of State	0		8		13		21	
Unknown	0		0		0		0	
Total	67		1,265		2,476		3,741	

<sup>\*</sup> Rates are per 1,000 age-specific female population.

Note: Rate not calculated where there were fewer than 5 births.

Source: Center for Health Data and Research, Nevada Vital Statistics Report 2001-2003

Many of the fathers of children born to teen mothers are older; almost half of young men who impregnate a minor teen are three or more years older. In addition, the majority of births to teen mothers are out-of-wedlock and often the burden of taking care of the baby falls to the girl's family because fathers are quite poor themselves. Not only does teen childbearing have serious consequences for teen parents, their children, and society, it also has important economic consequences. Helping young women avoid too early pregnancy and childbearing – and young men avoid premature fatherhood – is easier and much more cost effective than dealing with all of the problems that occur after the babies are born. A study by the National Campaign to Prevent Teen Pregnancy estimating the cost-effectiveness and cost-benefit of one particular curriculum found that for every dollar invested in the program, \$2.65 in total medical and social costs was saved. The savings were produced by preventing pregnancy and sexually transmitted diseases (STDs)<sup>9</sup>.

### Age of Fathers of Babies Born to Teen Mothers, Nevada Residence, 2001 - 2003

### 2001

Age of			F	ace/Ethni	city of Fath	ier		
Father	White	Black	Native	Asian	Hispanic	Other/ Unknown	Total	Percent
<15	0	0	0	0	0	0	0	0%
15-19	173	64	7	20	249	7	520	26%
20-24	376	108	13	43	514	7	1,061	54%
25+	101	31	2	12	235	4	385	20%
Unknown	14	25	3	1	21	1,696	1,760	
Total	664	228	25	76	1,019	1,714	3,726	100%

Note: Be aware that for about 47% of births to teen mothers, the father's age is unknown; the percentages listed here do not include these unknowns.

### 2002

Age of	Race/Ethnicity of Father										
Father	White	Black	Native	Asian	Hispanic	Other/ Unknown	Total	Percent			
<15	0	0	0	0	0	0	0	0			
15-19	179	62	8	21	244	5	519	27%			
20-24	359	108	11	54	496	10	1,038	55%			
25+	106	34	5	14	179	6	344	18%			
Unknown	8	6	0	1	8	1,761	1,784				
Total	652	210	24	90	927	1,782	3,685	100%			

Note: Be aware that for about 48% of births to teen mothers, the father's age is unknown; the percentages listed here do not include these unknowns.

Age of	Race/Ethnicity of Father										
Father	White	Black	Native	Asian	Hispanic	Other/ Unknown	Total	Percent			
<15	0	0	0	0	1	0	1	0%			
15-19	154	90	5	19	242	3	513	28%			
20-24 25+	309		19		503		960	53%			
25+	95	32	2	10	208	5	352	19%			
Unknown	0	1	0	0		1,958	1,961				
Total	558	211	26	60	956	1,976	3,787	100%			

Note: Be aware that for about 52% of births to teen mothers, the father's age is unknown; the percentages listed here do not include these unknowns.

### **Abortion**

According to the CDC, the annual number of legally induced abortions in the United States increased gradually from 1973 until it peaked in 1990 and has generally declined thereafter. In 2001, a total of 853,485 legally induced abortions were reported to the CDC by 49 reporting areas. The national legally induced abortion rate peaked at 364 per 1,000 in 1984 and since then has demonstrated a generally steady decline. In 2001, the abortion rate was 246 per 1,000 live births<sup>10</sup>. In 2003, Nevada's abortion rate was 258.7 per 1,000 live births. Washoe County residents had the highest rate with 307.0. Teenagers 19 or under accounted for 16.2 percent of the states' total induced abortions. Women ages 20-24 were responsible for the highest percentage (28.5%) of induced abortions.

Induced Abortions by County of Residence, Nevada, 1998-2003

County of	1998		1999		2000		2001		2002		2003	
Residence	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*	Number	Rate*
Carson City Churchill	236 89	327.8 242.5	191 71	258.1 200.6		278.2 178.0	196 85	263.4 247.8	237 73	328.7 214.7	199 61	276.0 186.5
Clark	3,973	200.2	5,155	247.8	6,045	275.1	6,907	302.1	6,944	292.3	6,465	261.0
Douglas	82	286.7	118	419.9	72	250.0	81	228.2	81	199.0		214.3
Elko Esmeralda	83(	115.6	64 0	99.7	50 0	93.1 	57 0	89.3	51 4	87.2	37	57.7
	0								-			
Eureka Humboldt	2 60	178.6	2 37	125.4	2 40	152.7	2 48	234.1	2 29	128.9	0 26	124.4
Lander	17	128.8	19	181.0	9	94.7	6	73.2	7	102.9	5	94.3
Lincoln	7	162.8	3		3		6	150.0	4		3	
Lyon Mineral	110 18	263.2 272.7	77 10	202.6 212.8	89 5	202.7 82.0	80 11	204.6 282.1	76 23	164.1 589.7	88 12	176.4 300.0
Nve	38	112.8	35	110.4	45	172.4	42	126.5	43	140.1	35	110.4
Pershing e:	11	134.1		147.1	5	72.5	9	125.0	7	111.1	4	
Storey	8	615.4			1		4		4		.3	
Washoe White Pine	1,773 12	372.1 98.4		322.7 111.1	1,372	277.4	1,787 8	351.0 115.9	1,598 10	301.4 129.9	1,657 9	307.0 103.4
Nevada Total	6,519		7,330	253.5		265.4	9,329	298.1	9,193	283.5		258.7
Out of State	806		766		734		781		767		628	
Total	7,325		8,096		8,732		10,110		9,960		9,323	

\*Rates are per 1,000 Live Births.

Note: Rate not calculated where there were fewer than 5 abortions.

### **Infant Mortality**

The United States infant mortality rate in 2002 increased to 7.0 infant deaths per 1,000 live births, compared with a rate of 6.8 in 2001<sup>11</sup>. In 2003, Nevada's infant mortality rate was 5.6 per 1,000 live births. The Black/African American population continues to have the highest rate of infant mortality with a rate of 16.5 per 1,000 live births in 2001 and 18.6 per 1,000 live births in 2002. That rate declined to 12.0 per 1,000 live births in 2003 but was still significantly higher compared to White (5.9 per 1,000 live births), Asian (3.3 per 1,000 live births), and Hispanic (4.4 per 1,000 live births).

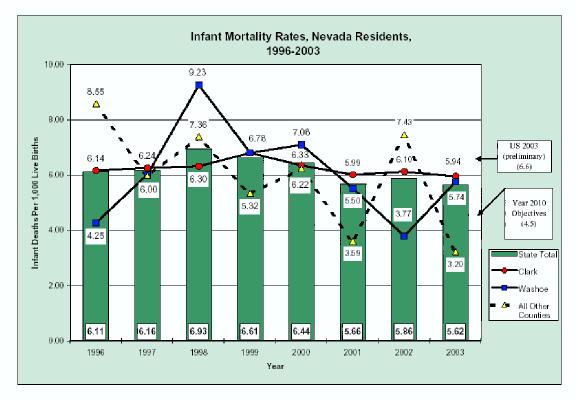
### Infant Mortality by Race/Ethnicity, Nevada Residents,

2003										
	White	Black	Native	Asian	Hispanic	Other/ Unknown	Total			
Neonatal	58	19	1	5	31	1	115			
Rate (1/1,000)	3.69	6.88	-	2.08	2.52		3.42			
Post-Neonatal	34	14	0	3	23	0	74			
Rate (1/1,000)	2.16	5.07	-		1.87		2.20			
Infant	92	33	1	8	54	1	189			
Rate (1/1,000)	5.86	11.95	•	3.32	4.38		5.62			
Live Births	15,541	2,732	404	2,383	12,192	353	33,605			
Adjusted Number	15,706	2,761	408	2,408	12,321		33,605			

Note: Rates are per 1,000 live births and have been adjusted for unknown race/ethnicity.

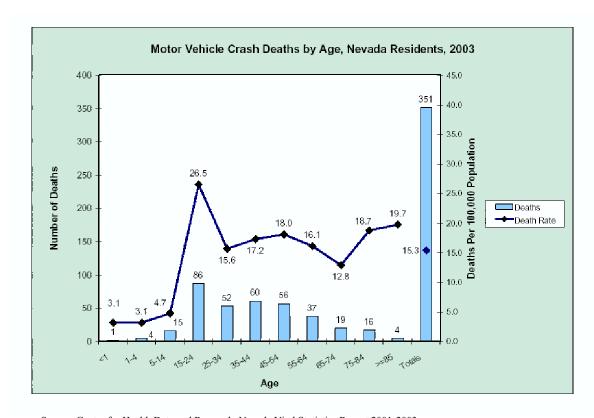
\*Rate not calculated for race/ethnicities with fewer than 5 infant deaths.

Source: Center for Health Data and Research, Nevada Vital Statistics Report 2001-2003

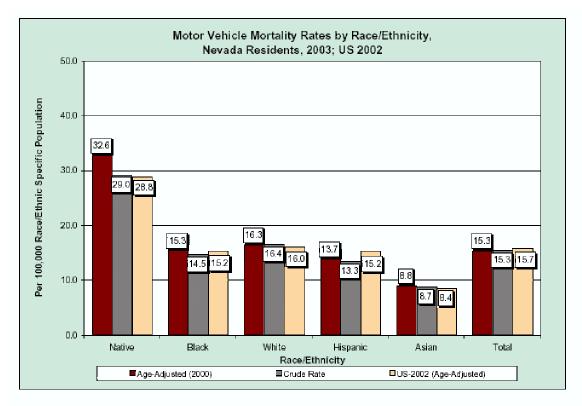


# Unintended Injury/Motor Vehicle Crash Deaths

Injury is a serious threat to the health and well being of children and adolescents in the United States. In the United States during 2003, 1,591 children ages 14 years and younger died as occupants in motor vehicle crashes, and approximately 220,000 were injured<sup>12</sup>. In Nevada, the 15-24 age group had the highest motor vehicle crash death rate of 26.5 per 100,000 population in 2003. Children 14 and under had a combined death rate of 10.9 per 100,000 population. Motor vehicle injuries are the greatest public health problem facing children today. In fact, they are the leading cause of death among them<sup>12</sup>. Teens are more likely than older drivers to speed, run red lights, make illegal turns, ride with an intoxicated driver, and drive after using alcohol or drugs. In addition, teens have the lowest rate of seat belt use compared with other age groups. It is important to promote correct installation of car seats, use of safety belts, and continuous support of ongoing media campaigns targeting drinking and driving.



Source: Center for Health Data and Research, Nevada Vital Statistics Report 2001-2003



Source: Center for Health Data and Research, Nevada Vital Statistics Report 2001-2003

Accidental Deaths by Age and Type of Accident, Nevada Residents, 2003

					Type of	Accident				
Age Groups	Motor Vehicle Accidents	Poisoning	Other Nontransport Accidents	Falls	Drowning and Submersion	Smoke, Fire and Flames	Water, Air and Space, and Other Transport Accidents	Other Land Transport Accidents	Firearms	Total
<1	1	0	12	0	2	0	0	0	0	15
1-4	4	0	3	0	4	1	0	0	0	12
5-14	15	0	3	0	2	1	2	1	0	24
15-24	86	20	2	3	8	1	0	0	3	123
25-34	52	45	8	5	2	1	2	0	0	115
35-44	60	90	10	3	3	2	4	4	1	177
45-54	56	81	10	2	2	5	1	4	0	161
55-64	37	20	13	11	2	1	4	2	1	91
65-74	19	3	8	14	1	1	0	1	0	47
75-84	16	3	. 7	33	2	2	0	0	0	63
85+	4	1	16	21	0	1	0	0	0	43
Unknown	1	0	4	0	0	0	0	0	0	2
Total	351	283	93	92	28	16	13	12	5	873

Source: Center for Health Data and Research, Nevada Vital Statistics Report 2001-2003

#### Suicide

The overall rate of suicide among youth has declined slowly since  $1992^{13}$  in the U.S. However, rates remain unacceptably high. Adolescents and young adults often experience stress, confusion, and depression from situations occurring in their families, schools, and communities. Such feelings can overwhelm young people and lead them to consider suicide as a "solution." In Nevada during 2003, there were 4 suicide deaths in the 5-14 age group (1.2 per 100,000). However, the rate was much higher for the 15-24 age group at 19.3 per 100,000 with a total of 63 deaths. According to the 2003 Youth Risk Behavior Survey (YRBS), 18.1 percent of high school students had seriously considered attempting suicide during the past 12 months, 15.1 percent had made a specific plan about how they would attempt suicide, and 8.8 percent actually attempted suicide one or more times. Of those who attempted suicide in the past 12 months, 33.2 percent resulted in injury, poisoning or overdose that required treatment by a doctor or nurse. It is important for schools and communities to have suicide prevention plans that include screening, referral, and crisis intervention programs for youth.

Nevada 2001, 2003 YRBS Survey	2001	2003
In past year, felt so sad or hopeless almost every day for more than 2 weeks in a row that they stopped doing some usual activities	29.7%	29.9%
In past 12 months, seriously considered attempting suicide	19.6%	18.1%
In past 12 months, made a specific plan about how they would attempt suicide	16.4%	15.1%
In past 12 months, actually attempted suicide one or more times	10.7%	8.8%
Of those who attempted suicide in past 12 months, attempts resulted in injury, poisoning or overdose that required treatment by a doctor or nurse	32.1%	33.2%

Source: Center for Health Data and Research, Bureau of Health Planning and Statistics and Nevada Department of Education 2003 YRBS

Suicide Deaths by County of Residence and Age Group, Nevada, 2003

County of	Age Groups											
Residence	ē.	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unknown	Total
Carson City	0	0	1	4	2	2	1	2	4	1	0	17
Churchill	0	0	0	1	2	1	0	1	1	0	0	6
Clark	0	3	35	39	51	50	29	28	18	10	1	264
Douglas	0	0	0	1	1	2	2	0	2	0	0	8
Elko	0	0	1	4	2	1	0	0	1	0	0	9
Esmeralda	0	0	0	0	0	0	1	1	0	0	0	2
Eureka	0	0	0	0	0	0	0	0	0	0	0	0
Humboldt	0	0	2	0	0	1	0	4	1	0	0	5
Lander	0	0	0	0	1	0	0	0	0	0	0	1
Lincoln	0	0	1	0	0	0	0	0	0	0	О	1
Lyon	0	1	0	3	2	1	2	0	2	0	0	11
Mineral	0	0	0	0	0	0	1	0	1	0	0	2
Nye	0	0	5	0	2	4	4	0	0	1	0	16
Pershing	0	0	0	1	0	0	1	0	0	0	0	2
Storey	0	0	0	0	0	0	0	0	0	0	0	0
Washoe	0	0	12	7	14	10	15	5	11	5	0	79
White Pine	0	0	0	0	0	0	0	0	0	0	0	0
Nevada Total	0	4	57	60	77	72	56	38	41	17	1	423
Out of State	0	0	6	9	8	11	8	2	1	0	0	45
Total	0	4	63	69	85	83	64	40	42	17	*	468

Note: There was an unusally high number of suicide deaths in the 85+ age group this year.

Source: Center for Health Data and Research, Nevada Vital Statistics Report 2001-2003

Suicide Deaths by County of Residence, Gender and Race/Ethnicity, Nevada, 2003

County of	Ger	ider	Race/Ethnicity						
Residence	Male	Female	White	Black	Native	Asian	Hispanic	Other/ Unknown	Total
Carson City	13	4	18	0	0	0	1	0	17
Churchill	3	3	6	0	0	0	0	0	6
Clark	214	50	203	14	3	12	30	2	264
Douglas	7	1	8	0	0	0	0	0	. 8
Elko	9	0	8	0	1	0	0	0	9
Esmeralda	2	0	2	0	0	0	0	0	2
Eureka	0	0	0	0	0	0	0	0	0
Humboldt	5	0	5	0	0	0	0	0	5
Lander	1	0	1	0	0	0	0	0	1
Lincoln	1	0	1	0	0	0	0	0	1
Lyon	7	4	10	0	0	0	1	0	11
Mineral	2	0	2	0	0	0	0	0	2
Nye	13	3	15	o	0	0	1	0	16
Pershing	2	0	1	0	1	0	0	0	2
Storey	0	0	0	0	0	0	0	0	0
Washoe	60	19	69	3	1	1	3	2	79
White Pine	0	0	0	0	0	0	0	0	0
Nevada Total	339	84	347	17	6	13	36	4	423
Out of State	39	6	36	6	0	3	0		45
Total	. 378	90	383	23	6	16	36	4	468

Source: Center for Health Data and Research, Nevada Vital Statistics Report 2001-2003

#### THE WORKGROUP PROCESS

During November 2004, nine needs assessment focus groups were held in the cities of Reno, Las Vegas, Yerington, Pahrump and Winnemucca. There were three each for women and infants, children ages one to nine, and adolescents 10 - 21. Social workers, health care providers, school officials, and private/public agency representatives were invited to listen to presentations regarding the needs assessment and the particular population the workgroup was asked to focus on. These focus groups discussed and deliberated the status of current and future needs for services, programs, and initiatives targeting the MCH populations in Nevada. Among the nine focus groups, hundreds of priority areas were identified and many themes emerged. However, all focus group meeting participants agreed domestic violence, oral health, teen pregnancy, and mental health are important issues. They felt that the current negotiated performance measures should remain the same and that work should continue on these. In addition, these priorities are where the NSHD should focus their efforts for the next five years (2006-2010). The following pages highlight the concerns of the various focus groups.

## WOMEN AND CHILDREN UNDER THE AGE OF 1

Findings from the three focus groups meetings (Reno, Las Vegas, Yerington):

- All focus groups meeting participants agreed domestic violence, oral health, teen
  pregnancy, and mental health are important issues. They felt that the current
  negotiated performance measures should remain the same and that work should
  continue on these.
- More in-depth data is needed by a variety of service providers on low birth weight babies i.e. alcohol, drugs, tobacco use, and prenatal care visits during pregnancy.
- Need to find new funding streams to provide more services for the MCH population.
- Need to address the issue of lack of health care providers, health insurance and health services for the rural area.
- Attach priority to money For example, make it mandatory that all WIC recipients attend classes or training on birth control, prenatal care, and parenthood training, etc.
- Provide integrated programs and better coordination between programs and the local community because many risk behaviors and health issues such as alcohol, drugs, depression, teen pregnancy, prenatal care, low birth weight, and unintentional injury are inter-related.
- Disseminate more funds to providers to provide primary care management/mentoring to teenagers, or other high-risk pregnant women.
- Expand the Bureau of Family Health Services website to include links to websites that deal with:
  - i) Low birth weight data
  - ii) MCHB
  - iii) Office of Women's Health
- Explore the possibility of greater collaboration between physicians, hospitals and certified nurse-midwives.
- Welfare to allow presumptive eligibility for Medicaid recipients.
- Target Hispanics and African Americans in social marketing campaigns.
- Reduce paper work and provide more help for Medicaid applicants.

- Reduce paper work and waiting time for reimbursement to promote more acceptance of Medicaid by physicians.
- Concern regarding the lack of data and education for nutrition, obesity, and the safety of the Internet.
- Access to mental and oral health is a big issue (either long waiting list or lack of services).
- Conduct a social marketing campaign targeting pregnant women and early entry into prenatal care.
- Provide grant funding to local agencies to provide direct service pregnancy care to women, including social services, transportation, and case management.
- Increase the Women's, Infants, and Children's (WIC) funding to local agencies in order to be able to hire more people and decrease the waiting time for people wanting to become WIC recipients.
- Send out a newsletter (via e-mail) to service providers periodically with information about available grants, new/existing services within the communities, conferences available, newly released published studies, etc.
- Provide community agencies/providers with continued domestic violence training through CD's or the Internet.
- Mandate that all WIC clinics screen patients for domestic violence.
- Train direct service providers in drug screening for pregnant women.
- Provide technical assistance and funding to drug treatment programs to better prepare them to work with pregnant, substance-abusing women.
- Establish a Pregnancy Risk Assessment Monitoring System (PRAMS) program in Nevada.
- Mandate that all hospitals begin using E-codes.
- Establish coding standards to improve data quality.
- Need more information from birth certificates, i.e.: STD's, illicit drugs, alcohol and tobacco use during pregnancy, and birth spacing.

## CHILDREN AGES (1-9) AND ADOLESCENTS AGES (10-21)

Findings from the six focus groups meetings (Reno, Las Vegas, Pahrump, Winnemucca):

- Lack of occupational and rehab therapists in rural area.
- Community health nurse from the State Health Division should provide low cost birth control for the teens.
- Need more services to address teen pregnancy, sex education, and sexually transmitted diseases (STD) education, teen suicide prevention etc.
- School system and school board should have a more open attitude toward sex education and send the correct message to their students.
- Few health care providers accepting Medicaid.
- The service providers would like to see more collaboration with the school district on teen pregnancy issue. Clinics specifically designed to serve pregnant teenagers are needed.
- Need more specific data for rural area.
- Many children are without health insurance in the rural area.
- Need for a resource directory that is up to date.
- Not enough health facilities and services in rural area.
- Undocumented parents with children born in the U.S. are unable to get insurance (Medicaid) for children due to not having a social security number.
- Undocumented children cannot receive services.
- No reliable system to track insurance coverage in Nevada.
- Long waiting list to assess mental health services.
- Not enough doctors accepting Medicaid in the rural area.
- Medicaid and Nevada  $\sqrt{\text{Check Up do not pay bills on time.}}$
- Paperwork for Medicaid and Nevada  $\sqrt{\text{Check Up}}$  is too cumbersome for families.
- Need for support groups that are not contingent on being in therapy for mental health patients.

- Many adolescents are without health insurance. 18 to 21 years olds need more health insurance options once they no longer qualify for Medicaid and Nevada √ Check Up.
- MCH needs to focus more on local level issues.
- MCH needs to facilitate more collaborative meetings so local organizations can know what other programs are doing.
- More promotion needed regarding how to access services with Medicaid and Nevada √ Check Up. Provide information on how many apply versus how many approved and the reason for denial.
- Explore nutrition and obesity issues, including data collection.
- Many children in schools are on psychoactive drugs such as Ritalin, Prozac, and Lithium because caregivers are unable to manage their behavior problems.
- Young children being diagnosed with bi-polar disorder and Attention Deficit Hyperactivity Disorder (ADHD) by family physicians.
- Domestic violence and child abuse are high in the Hispanic community. Many women don't want to report and place charges against their husbands because of financial concerns.
- Need more detailed information from death registry; document both primary and multiple cause of death.
- Need some other program to provide food for children > 6 once they are no longer eligible for WIC.
- Promote safer sex using the ABC model (Abstinence, Behavior, Contraception).
- Need for bilingual services for Spanish speaking families.
- Child abuse is a big issue in Winnemucca. Domestic violence education needed for Hispanic women and law enforcement.
- More foster homes and shelters are needed in the rural area for domestic violence and child abuse victims.
- Family resource centers need more support.
- Educate parents on how to discuss sex, birth control, drugs and alcohol with their children.

- Distribute information in non-traditional venues in order to reach the minority population i.e. laundromats, barbershop, Mexican markets, grocery stores etc. Target Hispanic and African American in social marketing campaign.
- Driver education needs to be put back into schools to promote safe and responsible driving habits.
- List physicians and health care providers who accept Medicaid.
- Recruit and retain more health care providers to serve in the rural area.
- Some schools don't want to enforce the laws on immunization because of a lack of funding.
- Only one doctor and one pediatrician accept Medicaid in Elko. Many patients need to travel to other areas in order to receive services.
- In Humboldt County, 4 doctors moved away in the last three years. In addition, many doctors are not taking new patients. Many children are without health insurance. Some need to travel 70 miles to Lovelock to receive services.
- Many rural areas are in need of oral health services with a shortage of dentists. Plus, many of the dentists don't accept Medicaid.
- Lack of transportation is a major barrier for the MCH population to receive services.
- Family Resource Centers are cutting services due to a funding shortfall. Many towns don't have a resource center.
- No child care services for lowest working class. Welfare recipients don't have any incentive to work as they cannot afford day care with minimum wages.
- Need some programs to help teen moms so they can continue their education.
- Many businesses in the rural areas are unable to provide health insurance for their employees. Their employees cannot afford to acquire health insurance on their own and therefore are without any health coverage.
- More mental health providers are needed for the rural area.
- Implement community water fluoridation in all counties.
- Increase the number of dental mobile units and provide services for more schools.

- Increase the number of school nurses so more children can receive appropriate services.
- Neutralize the negative image attached to Medicaid with more social marketing to get the enrollment up.
- MCH should work together with other state agencies and pool all the resources to create a one-stop shop that combine all the services such as mental health, oral health and primary care services.
- Train and educate all the health care providers to screen for mental health problems.
- Promote and build a sense of community that highlights positive issues, gets the community involved and fosters more supports.

Priority issues affecting the MCH populations in Nevada

### **Oral Health**

Oral health is one of the most pressing needs in Nevada for the MCH populations. Oral health problems cause pain and disability for many. The fact is disturbing because most oral diseases can be prevented. According to the Healthy Smile-Happy Child Oral Health Survey in 2003, 67 percent of third grade children in Nevada have experienced dental decay as demonstrated by the presence of a filling or an untreated cavity. Of these children, 39 percent have untreated dental decay and 7 percent of them were found with the presence of pain and/or swelling<sup>14</sup>. Low-income women and children are having trouble accessing oral health services. Most of them have to endure a long waiting list and some of them need to travel a long distance to receive services. For children, cavities are a common problem that begins at an early age. Untreated cavities may cause pain, dysfunction, absence from school, underweight, and poor appearance that can reduce a child's capacity to succeed in life. Unfortunately, many low-income children's cavity problems go untreated.

Thirteen out of the seventeen Nevada counties in Nevada were federally designated dental health professional shortage areas. Six of the thirteen rural counties (Storey, Pershing, Lander, Eureka, Esmeralda, and Lincoln) were without a full time dentist<sup>15</sup>. As of August 2003, there were 971 dentists with active Nevada licenses who provided the Nevada State Board of Dental Examiners with a Nevada address<sup>16</sup>. This equates to one dentist for every 2,365 Nevada residents. Nationwide, there is an average of 1,675 residents per dentist<sup>17</sup>. The dentist shortage is partly due to stringent Nevada Board of Dental Examiners guidelines. In addition, only a small percentage of dentists accept Medicaid patients. As of June 2004, there were 263 dentists enrolled as Nevada Medicaid providers. For those who accept Medicaid patients, only 109 of them were reimbursed more than \$10,000<sup>18</sup>.

Dental managed care for Medicaid and Nevada √ Check Up clients (primary children) went into effect in Clark County January 1, 2002 through a contract between Medicaid and the University of Nevada Las Vegas (UNLV) School of Dentistry. Both managed care plans in Clark County have contracted with UNLV for this service. The School is networking with dentists in the community who were previously Medicaid providers to expand the provider base. The average waiting time for services is about 45 days.

The MCH Needs Assessment recommends that these oral health areas be addressed for the MCH populations:

- Expand the school-based dental sealant program to serve more low-income at risk children
- Expand the mobile dental program to address the issue of lack of service providers, especially in the rural areas.
- Fluoridate all the drinking water in Nevada.
- Address the stringent requirements of the Nevada Dental Board for out-of-state dentists who want to practice in Nevada.

- Increase funding to recruit and retain more oral health services providers particularly in the rural areas.
- Expand the dental programs in Reno and Las Vegas to provide pro bono, fee for service, or reduced fee services.
- Address the issue of lack of dental providers who accept Medicaid patients, or only accept a few Medicaid recipients per year.
- Provide more oral health education brochures and preventive education classes for children to promote healthy habits.

Because many oral health problems are preventable, it makes sense to invest more resources in education and prevention. Studies have shown that dental sealants and fluoridation of water are very cost effective. For example, for every dollar spent on community water fluoridation, up to \$42 is saved in treatment costs for tooth decay. Approximately 70 percent of Nevada's residents have access to optimally fluoridated community water systems<sup>19</sup>.

## **Mental Health**

Mental health is fundamental to overall health and productivity. It is all too easy to dismiss the value of mental health until problems appear. Mental health disorders are as real, common, and treatable in children as they are in adults. In the United States, 1 in 10 children and adolescents suffer from mental illness severe enough to cause some level of impairment<sup>20</sup>. Left untreated, childhood mental disorders can lead to school failure, substance abuse, involvement with the juvenile justice system, violent behaviors, or even suicide. The long-term consequences of untreated childhood disorders are costly, in both human and fiscal terms. Unfortunately, only a few of them receive adequate treatment. There are several barriers for all the children and families in need of mental health services, including a lack of accessible services, under-funded public health systems, and the stigma surrounding mental illness. Insurance plans, HMOs, and Medicaid also pose barriers to children who need help, often offering little or no mental health benefit or not covering long-term or more complex problems. Many children who are in need of mental health services often have to endure a long waiting list because of limited resources.

According to the 2003 Youth Risk Behavior Survey (YRBS) of Nevada, 18.1 percent of high school students had seriously considered attempting suicide during the past 12 months, 15.1 percent had made a specific plan about how they would attempt suicide, and 8.8 percent of them actually attempted suicide one or more times. Of those who attempted suicide in the past 12 months, 33.2 percent resulted in injury, poisoning or overdose that required treatment by a doctor or nurse. It is important not to overlook the problem and help them foster more effective problem solving skills

Currently, there are more and more children in schools on psychoactive drugs such as Ritalin, Prozac, and Lithium. Some young children are being diagnosed with bi-polar disorder at a very young age. Hyperactive children are often disruptive in the classroom. Many teachers don't have the training or are unable to handle an increased class size and therefore opt to turn to medications for a quick fix.

The MCH Needs Assessment recommends the following:

- Educate all health care providers, teachers, school counselors, coaches, faith-based workers, and all persons who are involved in the care of children on how to identify early indicators for potential mental health problems.
- Promote the recognition of mental health as an essential part of child health.
- Integrate family, child and youth-centered mental health services into all systems that serve children and youth.
- Develop and enhance a public-private health infrastructure to support these efforts.
- Improve access to and coordination of quality mental health care services.

### **Domestic Violence**

Domestic violence occurs when one person uses force to inflict injury, either emotional or physical, upon another person they have, or had, a relationship with. Victims can be any age, race, or gender. Domestic violence is the single largest cause of injury to women between the ages of 15 and 44 in the United States, more than muggings, car accidents, and rapes combined<sup>21</sup>. Each year between two to four million women are battered, and 2,000 of these battered women will die of their injuries. In Nevada, a study performed by the Bureau of Family Health Services and Center for Health Data and Research, reviewed maternal deaths up to one year postpartum from all causes except accidents for the past twelve years. Suicide was the number one cause of death and homicide the second highest cause of death. Fifty-seven percent of the homicides were due to domestic violence. Despite the magnitude of the problem, identifying domestic violence victims is still a complex task. The majority of domestic violence victims do not discuss the violence with anyone. However, many will see a health care provider in some capacity for regular exams, specific health problems, or for the care of children and/or other dependants. Working in conjunction with other systems and domestic violence advocates, health care professionals are in a unique position to respond to victims and their children. They can also gain clues from observing a patient and his or her partner. For example, a battered patient may seem evasive, embarrassed, or inappropriately unconcerned with his or her injuries while the partner may be overly solicitous and answer questions for the patient.

The role of the state is to promote awareness of domestic violence as a public health concern, assist families through the social aspects of it, educate the public, and build infrastructure for the support of abused women and children. In collaboration with the Nevada Health Care Standard Team, the Bureau of Family Health Services established domestic violence health screening protocols and conducted training to health care providers. Collaboration with community-based agencies has occurred including individual shelters, and callers may access the Bureau's Maternal and Child Health Information and Referral Line 24-hours a day. A bilingual operator (English and Spanish) is available and can refer callers to appropriate domestic violence services in their community. The MCH Needs Assessment recommends the state continue to address the following issues:

- Mandate that all WIC clinics screen patients for domestic violence.
- Continue to provide training to all health care services providers.
- Provide more shelters for domestic violence victims.
- Educate all front line law enforcement officers that domestic violence is a crime not a cultural issue.
- Design more culturally specific training, education programs and social marketing campaigns against domestic violence.
- Collect more in-depth data to better address the issue.

# Medicaid and Nevada $\sqrt{\text{Check Up}}$

The Medicaid program pays for medical and medically related services for persons eligible for Medicaid. In State Fiscal Year 2004, Nevada Medicaid covered an average of 172,778 individuals including children, the aged, blind, and/or disabled, and people who are eligible to receive federally assisted income maintenance payments (Temporary Assistance to Needy Families - TANF)<sup>22</sup>. Nevada Medicaid administers both fee-forservice and managed care programs. Medicaid helps assure low-income and disabled children get necessary preventive, diagnostic and treatment services that enable them to develop and grow into healthy adults. The Nevada √ Check Up program provides health care coverage to approximately 26,000 low-income, uninsured Nevada children who do not qualify for Medicaid. These children come primarily from working households where the parents either do not have access to employer-sponsored health coverage or cannot afford private health insurance premiums. However, there are many barriers to the MCH populations accessing services from Medicaid and Nevada √ Check Up. The focus groups reported they include:

- Long waiting list due to limited resources.
- Low acceptance from health care service providers.
- Paperwork is too cumbersome for families and health care service providers.
- Reimbursement is too slow.
- Need to provide more transportation assistance to access services.
- Need more bilingual services.
- Need to focus on Hispanics and African Americans in social marketing campaigns.
- Need more promotion and education on how to access services.

# Low birth weight

Low birth weight babies may face serious health problems as newborns, and are at increased risk of long-term disabilities. Advances in newborn medical care have greatly reduced the number of infant deaths associated with low birth weight, as well as the number of disabilities survivors of low birth weight experience. Still, a small percentage of survivors are left with problems such as mental retardation, cerebral palsy and impairments in lung function, sight and hearing. We know only some of the reasons babies are born too small, too soon, or both. A mother's medical problems influence birth weight, especially if she has high blood pressure, certain infections or heart, kidney or lung problems. An abnormal uterus or cervix can increase the mother's risk of having a premature, low birth weight baby. A mother's actions before and during pregnancy may affect birth weight as well.

Smoking during pregnancy is the single most preventable cause of illness and death among mothers and infants. It is associated with increased risks for pre-term premature rupture of membranes, abruptio placentae, and placenta previa, and with a modest increase in risk for preterm delivery. Infants born to women who smoke during pregnancy have a lower average birth weight and are more likely to be small for gestational age than are infants born to women who do not smoke. Smoking during pregnancy carries a heavy financial burden. Health care costs at delivery for problems caused by smoking during pregnancy totaled about \$366 million in the United States during 1996<sup>23</sup>.

In Nevada between 2001-2003, the percent of low birth weight babies is considerably higher among mothers who use tobacco or alcohol during pregnancy compared to those who don't. Alcohol and tobacco use during pregnancy are self-reported and may therefore, be under-estimated. There are also many other factors that may contribute to low birth weight. All women can benefit from early advice on good nutrition, as well as about the importance of stopping risky behaviors, especially smoking, drinking alcohol and taking non-prescribed drugs. A 1996 study published in the American Journal of Clinical Nutrition suggested that consuming the recommended prenatal amount of folic acid throughout pregnancy might reduce the risk of having a pre-term and low birth weight baby.

The MCH Needs Assessment recommends that the state:

- Authorize the Welfare Division to allow presumptive eligibility for Medicaid recipients.
- Target Hispanics and African Americans in social marketing campaigns.
- Reduce paper work and waiting time for reimbursement to promote more acceptance of Medicaid by physicians.
- Conduct a social marketing campaign targeting pregnant women and early entry into prenatal care.
- Train direct service providers in drug screening for pregnant women.

**Tobacco Use During Pregnancy And Birth Outcome By Year (2001 – 2003)** 

Year	Tobacco Use During Pregnancy		Normal Birth Weight (>=2,500g, <=8,000g)	Low Birth Weight (>=1,500g, <2,500g)	Very Low Birth Weight (<1,500g)	Unknown	Total
2001	Yes	Count	2,969	360	56	0	3,385
		%	87.7	10.6	1.7	0.0	100.0
	No	Count	25,521	1,639	260	2	27,422
		%	93.1	6.0	0.9	0.0	100.0
	Unknown	Count	429	44	12	5	490
		%	87.6	9.0	2.4	1.0	100.0
	Total	Count	28,919	2,043	328	7	31,297
		%	92.4	6.5	1.0	0.0	100.0
2002	Yes	Count	2,780	327	59	0	3,166
		%	87.8	10.3	1.9	0.0	100.0
	No	Count	26,714	1,650	343	2	28,709
		%	93.1	5.7	1.2	0.0	100.0
	Unknown	Count	488	48	9	3	548
		%	89.1	8.8	1.6	0.5	100.0
	Total	Count	29,982	2,025	411	5	32,423
		%	92.5	6.2	1.3	0.0	100.0
2003	Yes	Count	2,481	311	61	13	2,866
		%	86.6	10.9	2.1	0.5	100.0
	No	Count	27,685	1,922	352	84	30,043
		%	92.2	6.4	1.2	0.3	100.0
	Unknown	Count	628	39	19	10	696
		%	90.2	5.6	2.7	1.4	100.0
	Total	Count	30,794	2,272	432	107	33,605
		%	91.6	6.8	1.3	0.3	100.0

Source: Center for Health Data and Research, Bureau of Health Planning and Statistics

# Alcohol Use During Pregnancy And Birth Outcome By Year (2001 – 2003)

Year	Alcohol Use During Pregnancy		Normal Birth Weight (>=2,500g, <=8,000g)	Low Birth Weight (>=1,500g, <2,500g)	Very Low Birth Weight (<1,500g)	Unknown	Total
2001	Yes	Count	339	48	7	0	394
		%	86.0	12.2	1.8	0.0	100.0
	No	Count	28,143	1,949	309	2	30,403
		%	92.6	6.4	1.0	0.0	100.0
	Unknown	Count	437	46	12	5	500
		%	87.4	9.2	2.4	1	100
	Total	Count	28,919	2,043	328	7	31,297
		%	92.4	6.5	1.0	0.0	100.0
2002	Yes	Count	348	43	8	0	399
		%	87.2	10.8	2.0	0.0	100.0
	No	Count	29,126	1,929	392	2	31,449
		%	92.6	6.1	1.2	0.0	100.0
	Unknown	Count	508	53	11	3	575
		%	88.3	9.2	1.9	0.5	100.0
	Total	Count	29,982	2,025	411	5	32,423
		%	92.5	6.2	1.3	0.0	100.0
2003	Yes	Count	307	33	9	1	350
		%	87.7	9.4	2.6	0.3	100.0
	No	Count	29,822	2,197	402	95	32,516
		%	91.7	6.8	1.2	0.3	100.0
	Unknown	Count	665	42	21	11	739
		%	90.0	5.7	2.8	1.5	100.0
	Total	Count	30,794	2,272	432	107	33,605
		%	91.6	6.8	1.3	0.3	100.0

Source: Center for Health Data and Research, Bureau of Health Planning and Statistics

### **Prenatal Care Visits**

Increases in use of early prenatal care have been observed among mothers in all major racial and ethnic groups. However, there continues to be racial differences in the percent of mothers reporting early prenatal care. For example, White Non-Hispanics had the highest prenatal care rate of 89.2 percent while White Hispanics had the lower prenatal care rate of 64.7 percent in 2003. In Nevada in 2003, 75.5 percent of live births were to women receiving early prenatal care in the first trimester. This is below the Healthy People 2010 target of 90.0 percent. Financial and health insurance problems are among the most important barriers to prenatal care. In addition, Nevada's on-going population growth and the growth of the Hispanic population in particular, which historically does not enter into prenatal care until much later in the pregnancy, also affected the prenatal care rate.

Another factor that has affected the number of women who enter prenatal care in the first trimester is the number of obstetrical physicians available. Due to a medical malpractice crisis, many physicians either stopped providing obstetrical services, won't see women before 12 weeks gestation, or moved out of state. Plus, many women who don't have a legal residency status are not eligible for any financial assistance for their prenatal care.

### The MCH Needs Assessment recommendations include:

- Target Hispanic women in educational campaign to make them aware of the need for early and continuous prenatal care.
- Provide funding to more providers who provide primary care management/mentoring to teenagers, or other high-risk pregnant women.
- Provide grant funding to local agencies to provide direct service pregnancy care to women, including social services, transportation, and case management.
- Increase the Women's, Infants, and Children's (WIC) funding to local agencies in order to be able to hire more people and decrease the waiting time for people wanting to become WIC recipients.
- Provide technical assistance and funding to drug treatment programs to better prepare them to work with pregnant, substance-abusing women.
- Establish a Pregnancy Risk Assessment Monitoring System (PRAMS) program in Nevada.
- Utilize more non-traditional ways to distribute information and educational materials regarding prenatal care i.e. laundromats, Mexican markets, grocery stores, and barber-shops, etc.

### **Adolescent Health**

In 2003, 70.8 percent of all deaths among persons aged 10-24 years in the United States resulted from four causes; motor vehicle crashes (32.3%), other unintentional injuries (11.7%), homicide (15.1%), and suicide (11.7%)<sup>24</sup>. Promoting the health and safety of adolescents is of critical importance to the future of the society. Adolescents make significant choices about their health and develop attitudes and health practices that affect their current safety and well being as well as influence their risk for future serious chronic disease. By investing in adolescent health today, we invest in the workforce, parents, and leaders of tomorrow. Improving adolescent health, safety, and well being is a complex issue that requires the collaborative efforts of parents and families, schools, health care providers, community organizations, faith-based organizations, media, and government agencies. Together, these entities are responsible for providing a nurturing structure and environment that support the healthy development of our youth.

The Youth Risk Behavior Surveillance System (YRBS) is a nation wide survey conducted every two years to monitor the health-risk behaviors among youth and young adults. The YRBS focuses on priority health-risk behaviors established during youth that result in the most significant mortality, morbidity, disability, and social problems during youth and adulthood. Students from the 9<sup>th</sup> to 12<sup>th</sup> grade were selected and participated in the survey, which was conducted by the Nevada Department of Education.

#### The MCH Needs Assessment recommends that the state:

- Need more services to address teen pregnancy, sex education, and sexually transmitted diseases (STDs) education, teen suicide prevention, etc.
- Community health nurse from State Health Division should provide low cost birth control for teens.
- Not enough health facilities and services in rural areas.
- More promotion needed how to access services with Medicaid and Nevada √ Check Up. Provide information on how many apply versus how many approved and the reason for denial.
- Need some other program to provide food for children > 5 once they are no longer eligible for WIC.
- Educate parents how to discuss sex, birth control, drugs and alcohol with their children.
- Driver education needs to be put back into schools to promote safe and responsible driving habits.
- Enforce the laws on immunizations.
- Address lack of transportation.

Tobacco Use	United States 2003	Nevada 2003
Percentage of students who smoked a whole cigarette for the first time		
before age 13	18.3%	18.8%
Percentage of students who smoked a cigarette on 20 or more of the past 30 days	9.7%	8.8%
Percentage of students who smoked two or more cigarettes per day on the days they smoked during the past 30 days	14.7%	11.8%
Percentage of students who smoked more than 10 cigarettes per day on the days that they smoked during the past 30 days	3.1%	1.4%
Percentage of students who smoked cigarettes on school property on one or more of the past 30 days	8.0%	7.4%
Percentage of students who used chewing tobacco or snuff on school property on one or more of the past 30 days	5.9%	2.8%

Source: Nevada Department of Education, Center for Health Data and Research, 2003 Nevada Youth Risk Behavior Survey (YRBS)

Smoking is the most common cause of lung cancer. Smoking is also a leading cause of cancer of the mouth, throat, bladder, pancreas, and kidney. Smoking is particularly harmful for teens because their body is still growing and changing. The known poisons in cigarette smoke affect their normal development and can cause life-threatening diseases. One of the most common reasons why teenagers smoke is peer pressure. Kids have a hard time resisting doing what their friends want. Teenagers who smoke are more likely to have lower self-image. They start smoking because they think it will give them a better image like being cooler, rebellious, more attractive, or more popular.

In Nevada, 18.8 percent of students start using tobacco before they were 13. Tobacco is often the first drug used by kids that could later lead to use of alcohol and other illegal drugs like marijuana. Beside all the health risks associated with smoking, kids who start smoking are more likely to get lower grades and become involved in other risk behaviors. It is important to recognize that most kids have their first cigarette at a very young age. If they don't start smoking by age 18, chances are they never will.

The data indicates the need for increased education, awareness, and prevention efforts by the NSHD, Department of Education, schools, media, and other agencies to address the problem of tobacco in our middle and high schools.

Source: Nevada Department of Education, Center for Health Data and Research, 2003 Nevada Youth Risk Behavior Survey (YRBS)

Unintentional Injuries and Violence	United States 2003	Nevada 2003
Rarely or never wear a seat belt when riding in a car driven by someone else	N/A	12.3%
		1=12,0
Ever belonged to a street gang	N/A	13.1%
Only sometimes, rarely or never feel accepted at school	N/A	22.8%
In past 30 days, were offended, threatened, frightened, or attacked one or more times because of their racial or ethnic background	N/A	19.6%
Believe there is gang activity in their school	N/A	43.5%
Percentage of students who during the past 30 days rode one or more times in a car or other vehicle driven by someone who had been drinking alcohol	30.2%	26.6%
Percentage of students who during the past 30 days drove a car or other vehicle one or more times when they had been drinking alcohol	12.1%	11.1%
Percentage of students who carried a weapon such as a gun, knife, or club on one or more of the past 30 days	17.1%	14.9%
Percentage of students who carried a weapon such as a gun, knife, or club on school property on one or more of the past 30 days	6.1%	6.3%
Percentage of students who did not go to school on one or more of the past 30 days because they felt unsafe at school or on their way to or from school	5.4%	8.7%
Percentage of students who had been threatened or injured with a weapon on school property one or more times during the past 12 months	9.2%	6.0%
Percentage of students who were in a physical fight one or more times during the past 12 months	33.0%	35.0%
Percentage of students who were in a physical fight on school property one or more times during the past 12 months	12.8%	12.6%
Percentage of students who were ever hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend during the past 12 months	8.9%	10.0%
Percentage of students who have ever been physically forced to have sexual intercourse when they did not want to	9.0%	11.0%

# **Unintentional Injury and Violence**

Unintentional injury is probably the most under recognized major public health problem we are facing today because injury prevention and control has not traditionally been perceived as a major public health issue. Rather, injuries have been viewed as unavoidable "accidents" that are part of everyone's life. However, injuries do not happen by chance. Like disease, they follow a distinct pattern. The above YRBS results clearly demonstrated that many students had put themselves at risk of injury. There is an urgent need to focusing on altering behavior, promoting environmental change within the community and school, or passing and enforcing new legislation that seeks to change social norms about acceptable safety behaviors. The MCH Needs Assessment recommends that the state address the unintentional injury and violence issue by the following:

- Establish a climate that demonstrates respect, support, and caring and that does not tolerate harassment, violence or bullying in school.
- Provide training on unintentionally injury and violence prevention that is incorporated into the curriculum in schools.
- Provide a safe school environment, including school buses that are free from weapons.
- Use active learning strategies, interactive teaching methods, and proactive classroom management to encourage student involvement in learning about unintentional injury and violence prevention.
- Involve parents, students, and other family members in all aspects of school life, including planning and implementing unintentional injury, violence, and suicide prevention programs and policies.

Alcohol and Other Drugs Use	United States 2003	Nevada 2003
Percentage of students who had at least one drink of alcohol on one or more days during their life	74.9%	75.6%
Percentage of students who had their first drink of alcohol other than a few sips before age 13	27.8%	32.0%
Percentage of students who had at least one drink of alcohol on one or more of the past 30 days	44.9%	43.4%
Percentage of students who had five or more drinks of alcohol in a row, that is, within a couple of hours, on one or more of the past 30 days	28.3%	27.8%
Percentage of students who had at least one drink of alcohol on school property on one or more of the past 30 days	5.2%	7.4%
Percentage of students who used marijuana one or more times during their life	40.2%	46.6%
Percentage of students who tried marijuana for the first time before age 13	9.9%	12.5%
Percentage of students who used marijuana one or more times during the past 30 days	22.4%	22.3%
Percentage of students who used marijuana on school property one or more times during the past 30 days	5.8%	5.3%
Percentage of students who used any form of cocaine, including powder, crack, or freebase one or more times during their life	8.7%	10.9%
Percentage of students who sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life	12.1%	14.5%
Percentage of students who used methamphetamines one or more times during their life	7.6%	12.5%
Percentage of students who took steroid pills or shots without a doctor's prescription one or more times during their life	6.1%	6.5%
Percentage of students who were offered, sold, or given an illegal drug on school property by someone during the past 12 months	28.7%	34.5%

Source: Nevada Department of Education, Center for Health Data and Research, 2003 Nevada Youth Risk Behavior Survey (YRBS)

# **Alcohol and Other Drugs Use**

Using alcohol and tobacco at a young age increases the risk of using other drugs later. Some teens will experiment and stop, or continue to use occasionally, without significant problems. Others will develop a dependency, moving on to more dangerous drugs and causing significant harm to themselves and possibly others. Many teenagers have a tendency to feel indestructible and immune to the problems that others experience. Many of them don't see the link between their actions today and the serious consequences tomorrow. Drug use is associated with a variety of negative consequences, including increased risk of serious drug use later in life, school failure, and poor judgment which may put teens at risk for accidents, violence, unplanned and unsafe sex, and suicide. The YRBS data demonstrated that many teenagers in Nevada had experience with alcohol and marijuana at a very young age. Plus, our teens had more access and there was a higher percentage using illegal drugs such as cocaine, marijuana, and methamphetamines. The data strongly indicate a need to address the abuse of alcohol and drugs among youth. Children need early education about drugs and alcohol, open communication, positive role modeling and early recognition and treatment of emerging problems.

#### The MCH Needs Assessment recommends that the state:

• Educate parents on how to discuss sex, birth control, drugs and alcohol with their children.

Sexual Behaviors of Nevada's High School Students

9		
Sexual Behaviors	United States 2003	Nevada 2003
Percentage of students who had sexual intercourse	46.7%	46.4%
Percentage of students who had sexual intercourse for the first time before age 13	7.4%	7.5%
age 10	7.470	7.570
Percentage of students who had sexual intercourse with four or more people during their life	14.4%	19.0%
Percentage of students who had sexual intercourse with one or more people during the past three months	34.3%	32.6%
Of students who had sexual intercourse during the past three months, the percentage who drank alcohol or used drugs before last sexual intercourse	25.4%	23.7%
Of students who had sexual intercourse during the past three months, the percentage who used a condom during last sexual intercourse	63.0%	62.0%
Of students who had sexual intercourse during the past three months, the percentage who used birth control pills during last sexual intercourse	17.0%	19.9%
		101070
Percentage of students who had been pregnant or gotten someone pregnant one or more times	4.2%	4.7%
Percentage of students who had ever been taught about AIDS or HIV infection in school	87.9%	88.0%

Source: Nevada Department of Education, Center for Health Data and Research, 2003 Nevada Youth Risk Behavior Survey (YRBS)

Nevada is in need of providing more sex education incorporated with the Abstinence Works program. The Abstinence Works program is opposed to teaching youth about how to use different contraceptive methods because that sends a mixed message. If young people learn that they should wait until they are married to have sex but are also given access to contraceptives, this implies sex before marriage is actually acceptable. However, based on the YRBS data, about 46.4 percent of our high school students already have sexual experience, which is about seven or eight years before the average age for marriage. Waiting until marriage is not occurring. According to the CDC's Behavioral Risk Factor Surveillance System in 2000, 98.9 percent of Nevadans think that students should receive education about HIV and AIDS in school. 76.5 percent believe this education should begin in elementary school. 88.9 percent of Nevadans would encourage a sexually active teenager to use a condom<sup>25</sup>. There is a need to provide more information about contraception, sexually transmitted diseases, and HIV/AIDS to teens so they can make more responsible choices.

Dietary Behaviors	United States 2003	Nevada 2003
Percentage of students who described themselves as slightly or very	00.00/	00.00/
overweight	29.6%	30.0%
Percentage of students who were trying to lose weight	43.8%	47.0%
Percentage of students who exercised to lose weight or to keep from gaining weight during the past 30 days	57.1%	61.9%
Percentage of students who ate less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight during the past 30 days	42.2%	38.0%
Percentage of students who went without eating for 24 hours or more to lose weight or to keep from gaining weight during the past 30 days	9.2%	9.9%
Percentage of students who vomited or took laxatives to lose weight or to keep from gaining weight during the past 30 days	6.0%	6.3%
Percentage of students who ate green salad one or more times during the past seven days	66.3%	66.0%
Percentage of students who drank three or more glasses of milk per day during the past seven days	17.1%	16.6%
Physical Activity	United States 2003	Nevada 2003
Percentage of students who exercised or participated in physical activities for at least 20 minutes that made them sweat and breathe hard on three or more of the past seven days	62.6%	66.6%
Percentage of students who participated in no vigorous or moderate physical activity during the past seven days	11.5%	7.8%

Source: Nevada Department of Education, Center for Health Data and Research, 2003 Nevada Youth Risk Behavior Survey (YRBS)

## **Dietary Behaviors and Physical Activity**

Poor eating and exercise patterns are often established during childhood. Over the past three decades, the childhood obesity rate has more than doubled for preschool children aged 2-5 years and adolescents aged 12-19 years, and it has more than tripled for children aged 6-11 years<sup>26</sup>. The rise in childhood obesity is the result of a number of relevant social, environmental, and policy aspects that influence eating and physical activity. They include:

- Urban and suburban designs that discourage walking and other physical activities.
- Frequent consumption of convenience foods that are high in calories and fat because families try to minimize food costs and preparation time.
- Rising price of fruits, vegetables, and other nutritious foods.
- Decreased opportunities for physical activity at school and after school due to lack of funding.
- Children are spending more time on television, video games, Internet, and computers than playing outdoors.

Children are at risk of developing serious psychosocial burdens related to being obese in a society that stigmatizes this condition, often fostering shame, self-blame, and low self-esteem that may impair academic and social functioning that carry into adulthood. Health education focusing on nutrition is key to reducing the proportion of overweight children and promoting proper nutrition habits. Schools should ensure that all children participate in a minimum of 30 minutes of moderate to vigorous physical activity during the school day and promote physical activity through classes, sports programs, clubs, lessons, and after school programs. Assessments of students' weight, height, and body mass index should also be conducted annually and make that information available to parents. Parents should promote healthful eating behaviors and regular physical activity for their children. They should also limit their children's television and/or computer time and serve as positive role models for their children regarding eating and physical activity behaviors.

#### The MCH Needs Assessment recommends the state:

• Explore nutrition and obesity issues, including data collection.

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